

Figure 1a

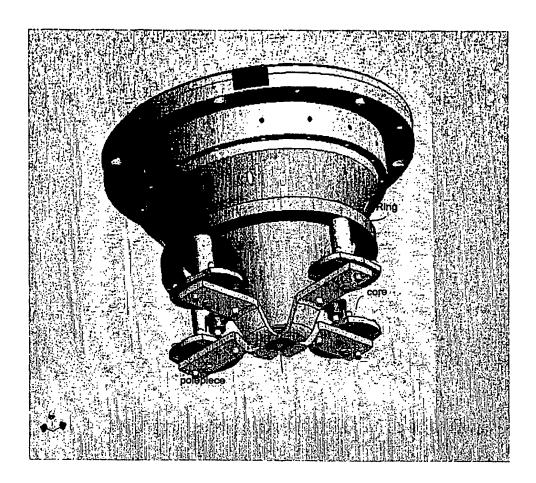


FIGURE 1b

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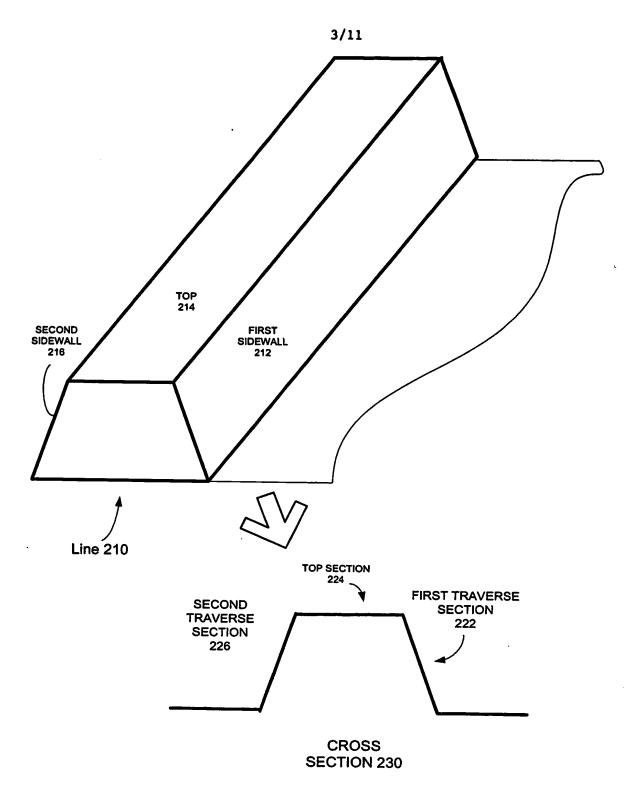
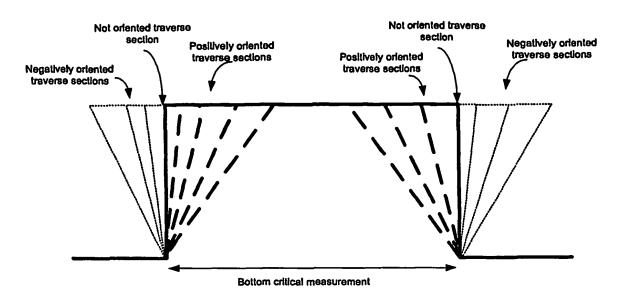


FIGURE 2a

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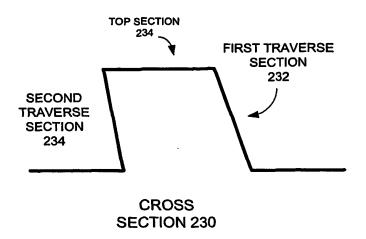


FIGURE 2b

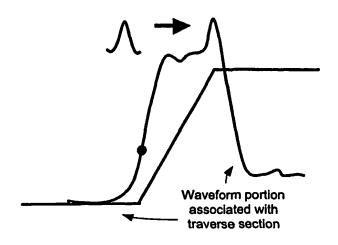


FIGURE 3a

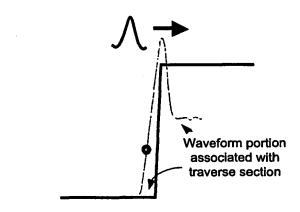


FIGURE 3b

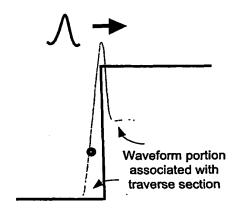


FIGURE 3c

Obtain a waveform representative of detection signals generated as a result of an interaction between a scanning electron beam and a structural element.

472
Calculate at least three points – a first point that is characterized by a maximal derivative value, a lower point and an upper point that are characterized by a predefined derivative values.

Fig. 4

Determine a location point in response to an intersection between a height threshold and a line that is drawn between the upper and lower

474

points.

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Scanning, at a first tilt state, a first portion of a reference structural element and at least the first traverse section of the measured structural element, to determine a first relationship between the reference structural element and the first traverse section.

530

Scanning, at a second tilt state, a second portion of a reference structural element and at least the second traverse section of the measured structural element, to determine a second relationship between the reference structural element and the second traverse section.

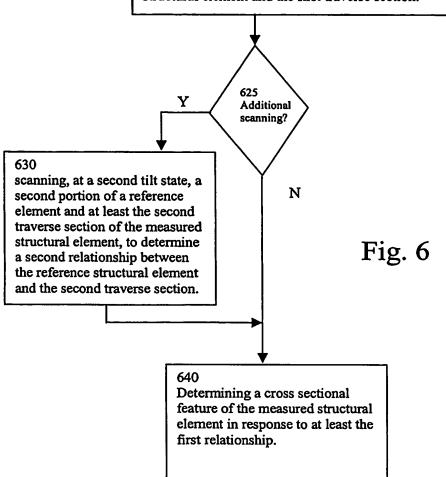
540

Determining a cross sectional feature of the measured structural element in response to the first and second relationships.

Fig. 5

620

Scanning, at a first tilt state, a first portion of a reference element and at least the first traverse section of the measured structural element, to determine a first relationship between the reference structural element and the first traverse section.



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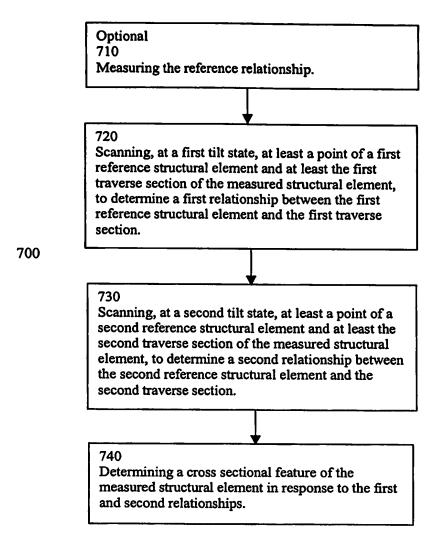
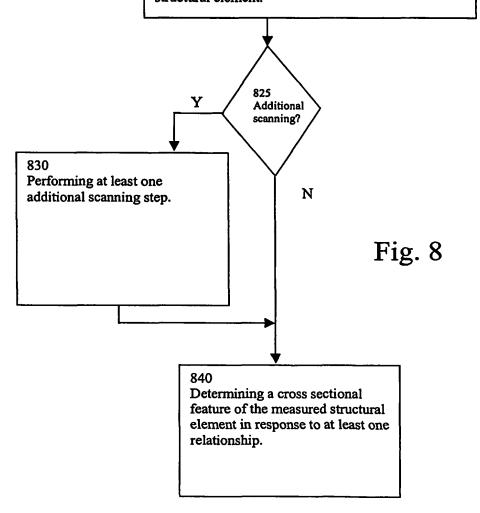


Fig. 7

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Scanning, at a first tilt state, a portion of a reference element and at least the first and second traverse sections, to determine at least one relationship between the reference element and the at least one scanned traverse element. During this step the electron beam can be substantially perpendicular to the measured object that includes the measured structural element.



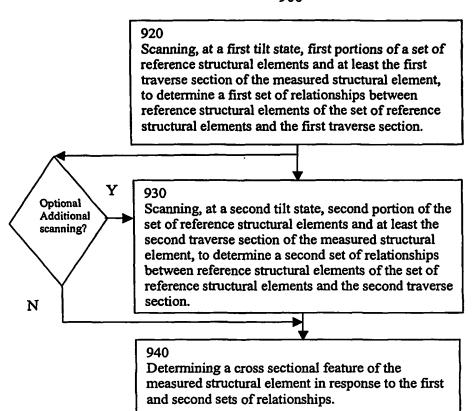


Fig. 9